



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,393	12/03/2003	Ajay Gupta	48354-0001-00-US (228150)	5022
23973 7590 08/21/2008 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996				
EXAMINER FOREMAN, JONATHAN M				
ART UNIT		PAPER NUMBER		
3736				
MAIL DATE		DELIVERY MODE		
08/21/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/725,393

Applicant(s)

GUPTA, AJAY

Examiner

JONATHAN ML FOREMAN

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-14, 17-26, 28, 30-42, 44-51, 53 and 55-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-14, 17-26, 28, 30-42, 44-51, 53, 55-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1, 4, 5, 12, 14, 17, 21, 24, 26, 55, 56 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,293,161 to MacDonald et al.

In regard to claims 1, 4, 5, 12, 14, 17, 21, 24, 26, 55, 56 and 58, MacDonald et al. disclose a portable multi-functional electronic communication and medical diagnostic device including a vibratory component for generating vibration in a first and second modes, the vibratory component being adapted to generate vibration at a preprogrammed magnitude and frequency in a first mode, the component being adapted to generate quantified vibration at one or more of a selected magnitude and a selected frequency in the second mode (Col. 2, lines 35 – 37); a selector for selecting one or the other of the first and second modes (Col. 2, lines 37 - 41); a probe (pager housing) for transmitting vibration from the vibratory component to a subject; and a display for indicating the frequency of vibration in the second mode (Col. 2, lines 56 – 59); wherein the first mode the device functions as a portable electronic device comprising a pager (Col. 1, line 56); and in the second mode the device operates to detect the presence or absence of neuropathy in a subject. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus that differentiates it from a prior art reference disclosing the structural limitations of the claim. *In re Pearson*, 494 F.2d 1399, 181 USPQ 641 (CCPA 1947); *In re Yanush*, 477 F.2d 958, 177 USPQ705 (CCPA 1973); *In re Finsterwalder*, 436

Art Unit: 3736

F.2d 1028, 168 USPQ 530 (CCPA 1971); *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); *Ex parte Masham*, 2 USPQ2d 1647 (BbPatApp & Inter 1987).

3. Claims 28, 36, 41, 42, 45, 51 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Mechaber.

In regard to claims 28, 36, 41, 42, 45, 51 and 53, Mechaber discloses a method of detecting neuropathy in a subject, comprising: providing a portable multi-functional electronic communication and medical diagnostic device, the device comprising a component for generating vibration, the component being adapted to generate vibration in response to a remote wireless signal in a first mode when the device is operated as an electronic communication device comprising one or more of a cellular phone, pager, and beeper, the component being further adapted to generate vibration at one or more selected magnitudes or frequencies in a second mode when the device is used for a medical diagnosis; selecting the second a-mode of vibration; generating vibration of a predetermined magnitude or frequency as a threshold stimulus and applying the device to a subject; and allowing the subject to indicate whether or not vibration can be detected; determining the absence or presence of neuropathy by the subject's ability to detect or not detect the vibration (See Vibrating pager tests nerves).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4 – 14, 17 – 26, 28, 30, 32, 34, 36 – 42, 44 – 47, 49, 51, 53 and 55 – 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,002,065 to LaCourse et al. in view of U.S. Patent No. 6,478,736 to Mault.

In regard to claims 1, 4 – 14, 17 – 26, and 55 – 58, LaCourse et al. disclose a medical diagnostic apparatus including a component (103) for generating and displaying quantified vibration to be used in a medical diagnosis. The component generates vibration of a fixed magnitude or of a variable magnitude in a linear manner (Col. 3, line 53 – Col.4, line 56). The component generates vibration of a fixed frequency or of a variable frequency. The component generates a plurality of sets each of a fixed magnitude or frequency (Col. 3, line 53 – Col.4, line 56). When the apparatus is applied to a subject, threshold for the perception or disappearance of vibration can be determined as a measure of nerve function to detect neuropathy (Col. 5, lines 58 – 60). A probe extends from the device for applying a vibration to a subject. LaCourse et al. disclose the apparatus being a computer based device, but fail to disclose the component having a mode selector for selecting between a first mode of vibration and a second mode of vibration, wherein the device operates as a portable electronic device from the group consisting of a cellular phone, pager and beeper and the vibratory component generates vibration in a first mode in response to a remote wireless signal. However, Mault teaches a diagnostic computer based system. Mault further teaches that in addition to being a computer based system, the system can be a portable electronic device operable as a cellular phone, pager and beeper (Col. 6, lines 13 – 20) that has a first and second functionality (Col. 6, lines 4 – 8). Cellular phones are known to have a vibratory component that generates a vibration in response to a remote wireless signal in a first mode (when a call is received) and to produce a vibration in a second mode (when a scheduled alarm goes off). Cellular phones are also known to have a mode selector (i.e. a menu) for selecting between the first and second modes. Official notice is being taken of this

fact. The claims would have been obvious because a particular known technique was recognizes as part of the ordinary capabilities of one skilled in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention to apply the technique of combining a diagnostic and communication apparatus as taught by Mault to improve the vibratory screening and diagnostic system as disclosed by LaCourse et al. for the predictable result of having a functioning computer based diagnostic system that can be used as a portable communication device.

In regard to claims 28, 30, 32, 34, 36 – 42, 44 – 47, 49, 51 and 53, LaCourse et al. disclose a method including providing a medical diagnostic apparatus including and a component (103) for generating vibration to be used in a medical diagnosis. LaCourse et al. disclose generating vibration and applying the apparatus to the extremity of a subject (Col. 3, lines 43 – 46); and diagnosing neuropathy based on detection or non-detection of vibration by the subject (Col. 5, lines 58 – 60). LaCourse et al. discloses determining a threshold for the subject's ability to detect vibration of a predetermined magnitude or frequency. LaCourse et al. discloses determining a perception threshold for the subject's ability to detect vibration by increasing the magnitude or frequency of vibration. LaCourse et al. discloses determining a disappearance threshold for the subject's ability to no longer detect vibration by decreasing the magnitude or frequency of vibration (Col. 3, line 53 – Col.4, line 56). The vibration includes a predetermined magnitude or frequency equal to about 95th – 97th percentiles of a normal population. LaCourse et al. discloses a fixed magnitude or frequency or a variable magnitude or frequency (Col. 3, line 53 – Col.4, line 56). LaCourse et al. disclose the apparatus being a computer based device, but fail to disclose the component having a mode selector for selecting between a first mode of vibration and a second mode of vibration, wherein the device operates as a portable electronic device from the group consisting of a cellular phone, pager and beeper and the vibratory component generates vibration in a first mode in response to a remote

wireless signal. However, Mault teaches a diagnostic computer based system. Mault further teaches that in addition to being a computer based system, the system can be a portable electronic device operable as a cellular phone, pager and beeper (Col. 6, lines 13 – 20) that has a first and second functionality (Col. 6, lines 4 – 8). Cellular phones are known to have a vibratory component that generates a vibration in response to a remote wireless signal in a first mode (when a call is received) and to produce a vibration in a second mode (when a scheduled alarm goes off). Cellular phones are also known to have a mode selector (i.e. a menu) for selecting between the first and second modes. Official notice is being taken of this fact. The claims would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention to apply the technique of combining a diagnostic and communication apparatus as taught by Mault to improve the vibratory screening and diagnostic system as disclosed by LaCourse et al. for the predictable result of having a functioning computer based diagnostic system that can be used as a portable communication device.

6. Claims 31, 33, 35, 48, 50 and 59 - 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,002,065 to LaCourse et al. in view of U.S. Patent No. 6,478,736 to Mault as applied to claims 30, 32, 34, 47 and 49 above, and further in view of US Patent No. 5,931,793 to Laudadio.

In regard to claims 31, 33, 35, 48 and 50, LaCourse et al. in view of Mault disclose determining a vibration threshold in order to diagnose a medical condition, but fail to disclose grading the threshold low, medium, or high when compared to a preset standard thereby indicating the severity of the medical condition. However, Laudadio discloses determining a vibration threshold and grading the threshold low, medium, or high when compared to a preset standard

thereby indicating the severity of the medical condition (Col. 3, lines 18 – 25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as disclosed by LaCourse et al. and Mault to grade the vibration threshold low, medium, or high when compared to a preset standard as taught by Laudadio in order to quantify minimal impairment, moderate neuropath and severe neuropathy (Col. 3, lines 18 – 25).

In regard to claims 59 – 61, LaCourse in view of Mault fail to disclose the vibratory component comprising a piezoelectric transducer (Col. 1, line 67) or a DC motor, a vibrating head adapted to be applied to the extremity of a subject, and a shaft transmitting a vibration from the motor to the head. Laudadio discloses a vibratory component comprising a piezoelectric transducer or a DC motor, a vibrating head adapted to be applied to the extremity of a subject, and a shaft transmitting a vibration from the motor to the head, the shaft comprises an offset weight thereon (Col. 3, lines 44 – 45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device as disclosed by LaCourse in view of Mault to include a vibratory component as taught by Laudadio in order to transfer a vibration to a patient.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the

mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN ML FOREMAN whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. F./
Examiner, Art Unit 3736

/Max Hindenburg/

Application/Control Number: 10/725,393

Page 9

Art Unit: 3736

Supervisory Patent Examiner, Art Unit 3736